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## What is claimed is:

- 1. A non-ionic graft copolymer comprising a hydrophobic backbone and non-ionic, hydrophilic side chains, said side chains having a number average molecular weight of at least 500; wherein said graft copolymer is substantially insoluble in water, but is soluble in an aqueous vehicle comprising no more than 80% by weight water and at least one organic cosolvent.
- The graft copolymer of claim 1, wherein the backbone is comprised of 2.. monomers selected from the group consisting of methyl acrylate, methyl 10 methacrylate, styrene, alpha-methyl styrene, phenyl acrylate, phenyl methacrylate, benzyl acrylate, benzyl methacrylate, 2-phenylethyl acrylate, 2-phenylethyl methacrylate, 2-phenoxyethyl acrylate, 2-phenoxyethyl methacrylate, 1-napthalyl acrylate, 2-naphthalyl acrylate, 2-naphthalyl methacrylate, p-nitrophenyl adrylate, p-nitrophenyl methacrylate, 15 phthalimidomethyl acrylate, phthalimidomethyl methacrylate, N-phenyl acrylamide, N-phenyl methacrylamide, N-benzyl acrylamide, N-(2phenylethyl)acrylamide, N-(2/ph/thalimidoethoxymethyl) acrylamide, vinyl benzoate, ethyl acrylate, n/butyl-acrylate, 2-ethylhexyl acrylate, ethyl methacrylate, n-butyl methacrylate, t-butyl methacrylate, 2-ethylhexyl 20 methacrylate, cyclohexyl methacrylate, vinyl acetate, and vinyl butyrate.
  - 3. The graft copolymer of claim 1, wherein the side chains have a number average molecular weight of 1000-2000 and comprise macromonomers which are
- 25 a) soluble in water but are insoluble in non-polar organic solvents; and
  - b) made from non-ionic monomers selected from the group consisting of ethyoxytriethylene glycol methacrylate, methoxypolyethylene oxide methacryate, methoxypolyethylene oxide acryate, polyethylenoxide methacrylate, polyethylenoxide acrylate, and N-vinyl pyrrolidone.
  - 4. The graft copolymer of claim 1, wherein the side chains comprise 15 60% by weight of the graft copolymer.
- 5. The graft copolymer of claim 4, wherein the side chains comprise 20 50% by weight of the graft copolymer.



6. An aqueous coating composition comprising

a) an aqueous vehicle comprising water and at least one organic cosolvent, wherein water comprises no more than 80% by weight of the total weight of the vehicle; and

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a non-ionic graft copolymer comprising a hydrophobic backbone and non-ionic, hydrophilic side chains, said side chains having a number average molecular weight of at least 500, wherein the graft copolymer is soluble in the vehicle but substantially insoluble in water.

- 7. The composition of claim 6, wherein said aqueous vehicle comprises 60-70% by weight of water based on the total weight of the vehicle.
  - 8. The composition of claim 6, comprising:
    - an aqueous vehicle comprising water, a water miscible pyrrolidone, and a glycol ether, wherein water comprises no more than 80% by weight, based on the total weight of the vehicle;
    - b) a graft copolymer binder having a hydrophobic backbone and nonionic, hydrophilic side chains, which binder is soluble in the

      aqueous vehicle but substantially insoluble in water; and
    - c) a surfactant selected from the group consisting of silicon surfactants and fluorinated surfactants.

The composition of laim 6, wherein the graft copolymer backbone is 9. comprised of monomers selected from the group consisting of methyl acrylate, methyl methacrylate, styrene, alpha-methyl styrene, phenyl acrylate, phenyl/methacrylate, benzyl acrylate, benzyl methacrylate, 2phenylethyl agrylate, 2-phenylethyl methacrylate, 2-phenoxyethyl acrylate, 25 2-phenoxyethyl methacrylate, 1-napthalyl acrylate, 2-naphthalyl acrylate, 2-naphthaly methacrylate, p-nitrophenyl acrylate, p-nitrophenyl methacrylate, phthalimidomethyl acrylate, phthalimidomethyl methacrylate, N-phenyl acrylamide, N-phenyl methacrylamide, N-benzyl acrylamide, N-(2-phenylethyl)acrylamide, N-(2-phthalimidoethoxymethyl) 30 acrylamide, vinyl benzoate, ethyl acrylate, n-butyl acrylate, 2-ethylhexyl acrylate, ethyl methacrylate, n-butyl methacrylate, t-butyl methacrylate, 2eth/ylhexyl methacrylate, cyclohexyl methacrylate, vinyl acetate, and vinyl butyrate.

